

REMARKS

This Amendment is in response to the Office Action dated July 12, 2002 in which claims 13-19 were initially rejected, and claims 1-12 were withdrawn from consideration as being directed to a non-elected invention. Applicants respectfully request reconsideration and allowance of all pending claims in view of the above-amendments and the following remarks.

I. CONSIDERATION OF REFERENCES CITED IN PTO-1449

Applicants' received a copy of Applicants' form PTO-1449 indicating that the references cited on the form were considered July 2, 2002. However, the Examiner's initials were not placed next to each reference to indicate that the reference was considered. Applicants' respectfully request a further copy of the form showing the Examiner's initials next to each reference.

II. REJECTION OF CLAIMS 13-16 AND 18 UNDER §102(b)

Claims 13-16 and 18 were rejected under §102(b) as being anticipated by Frees et al. U.S. Patent No. 5,905,608. Frees et al. disclose a disc drive in FIG. 2 having an actuator assembly 76. The Office Action suggested claims 13-16 and 18 are "product by process" claims. As such, the patentability of the final product is determined by the product itself and not the actual process. Therefore, no weight was given to the process portion in determining patentability.

A. **The Product By Process portions of Claims 13 and 18 Have Been Removed**

Accordingly, claims 13 and 18 are amended to remove the "product by process" elements of the claim and to add more positively defined structural limitations. Claims 14-16 are canceled.

Claim 13 is now directed to a disc drive comprising an actuator with a machined external peripheral surface extending along an entire periphery of the actuator and comprising a

desired profile dimension entirely defined by the machined external peripheral surface.

Claim 18 further recites that the machined external peripheral surface of the actuator has a tolerance of 0.005 inches or less relative to the desired profile dimension.

Since a "machined peripheral surface" can clearly be identified by inspection of the surface and its properties, this term is a definite structural limitation that bears patentable weight within the claims.

B. Claims 13 and 18 Are Not Anticipated By Frees.

A machined periphery allows the external surface of the actuator to be manufactured to a lower tolerance than if the surface was simply extruded or cast without machining the surface. That is, the precise profile dimension of the surface can be achieved with greater accuracy and certainty. Thus, when manufacturing a group of similar actuators, there will be less variance in the profile dimension from one actuator to the next. This results in a reduced degree of variance in the resonance characteristics from one actuator to the next. Therefore, if the resonance characteristics of one actuator, a group of like-manufactured actuators, are known, those characteristics can be attributed to the other actuators in the group to a greater degree of accuracy.

In contrast, Frees et al. suggest that unwanted high frequency modes can be lowered by, "adding mass to the outer arms 92, 94, by removal of material at selected high stress positions on the outer arms 92, 94 or by reducing the thickness of selected portions of the outer arms 92, 94." (Column 5, lines 34-40). For example in FIG. 5a, cross bar 128 of outer arms 114, 116 has material removed to form notched portions 130 at regions of high stress during in-plane vibration deformation. (Column 6, lines 17-20).

While these steps may lower resonance frequencies, they do not lead to more accurately defined profile dimensions of the actuator as in the present invention.

Frees et al. do not disclose an actuator having a machined external peripheral surface and a desired profile dimension which is entirely defined by the machined external peripheral surface. Since the purpose and the resulting structure disclosed by Frees et al. is different than that recited in claims 13 and 18, Applicants respectfully request that the rejection under §102(b) based on Frees et al. be withdrawn.

III. REJECTION OF CLAIMS 13 AND 17 UNDER §103(a)

Claims 13 and 17 were rejected under §103(a) as being unpatentable over Yaeger U.S. Patent No. 6,377,424 in view of Applicant Admitted Prior Art.

A. **Yaeger is Not a Valid Reference Under §103(a)**

Yaeger is not believed to be valid prior art under §103(a). Under §103(c), for applications filed after November 29, 1999, subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f) and (g) of section 102, shall not preclude patentability under §103 where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

1. Statement of Common Ownership

Both the present application and Yaeger are assigned to Seagate Technology LLC. Both of these applications are based on inventions made by employees of Seagate in the scope of their employment. These employees have obligations to assign inventions made in the scope of their employment to Seagate. Thus, the subject matter of both applications were, at the time the inventions were made, subject to obligations of assignment to the same person per §103(c).

2. Yaeger Has the Potential to Qualify as Prior Art Only Under §102(e)

Yaeger was filed January 15, 1998, which was before the December 29, 2000 filing date of the present application and of the March 31, 2000 provisional filing date. However, Yaeger was not published until April 23, 2002, after the filing date of the present application. Thus Yaeger has the potential of qualifying as prior art only under §102(e). As such, Yaeger is disqualified as a reference under §103.

Since Yaeger is not a valid reference under §103, Applicants respectfully request that the rejection of claims 13 and 17 based on Yaeger and Applicants' Admitted Prior Art be withdrawn.

IV. REJECTION OF CLAIM 19 UNDER §103(a)

Claims 13 and 17 were rejected under §103(a) as being unpatentable over Yaeger U.S. Patent No. 6,377,424 in view of Nikolovski U.S. Patent No. 6,269,700. Again, since Yaeger is not a valid reference under §103, Applicants respectfully request that the rejection of claim 19 based on Yaeger be withdrawn.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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MARKED-UP VERSION OF REPLACEMENT CLAIMS

Please amend claims 13 and 17-19 as follows:

13. (Amended) A disc drive [having an actuator manufactured according to a process comprising steps of :

- (a) manufacturing a disc drive actuator; and
- (b) machining a peripheral surface of the actuator to a desired profile dimension] comprising an actuator with a machined external peripheral surface extending along an entire periphery of the actuator and comprising a desired profile dimension entirely defined by the machined external peripheral surface.

17. (Amended) The disc drive of claim 13 wherein [machining step (b) comprises machining] the machined external peripheral surface of the actuator [to] has a tolerance of less than 0.010 inches [or less] relative to the desired profile dimension.

18. (Amended) The disc drive of claim 13 wherein [manufacturing step (a) comprises generating an extrusion having a cross-sectional shape substantially that of a desired top cross-sectional shape of the actuator] the machined external peripheral surface of the actuator has a tolerance of 0.005 inches or less relative to the desired profile dimension.

19. (Amended) A disc drive comprising:
a disc rotatable about a central axis; and
actuator means for supporting and actuating a transducer relative to the disc and having a machined external peripheral surface [which is machined to] with a desired profile dimension, which is within a tolerance of less than 0.010 inches relative to the desired

profile dimension, that is defined for limiting variations in resonance characteristics of the actuator means.